KATHREIN

Euroline®

Operating Instructions

DVB-T Receiver
UFE 371/S

KATHREIN

Antennen · Electronic

Preface

Dear Customer,

These operating Instructions will help you make optimum use of the many functions of your new DVB-T receiver.

We have made the operating instructions as easy as possible to understand, and as short as possible.

For environmental protection, we have equipped a power switch. Switch off your receiver to save electricity in case you are absent for a longer period. For shorter periods, switch the receiver to stand-by with the remote control, so that the power consumption is reduced to a minimum.

Enjoy the reception quality and your new DVB-T receiver.

KATHREIN-Euroline®-Team

Important Notices

In the unlikely event of problems with your receiver, get in touch with your specialist dealer.

Every now and then, changes are made to the allocation of the programmes. In these cases, you will have to reallocate the programmes, although the factory-set pre-programming always come up to the latest status. You will find the information you need to reallocate the programmes in the Internet or in the relevant periodicals.

Your receiver has been factory-set with the latest software. However, we are always keen to adapt the software to our customers' requirements and the state-of-the-art. You will find more information on this subject in chapter "Software Update".

Please keep the original packing in case you have to send the receiver to us!

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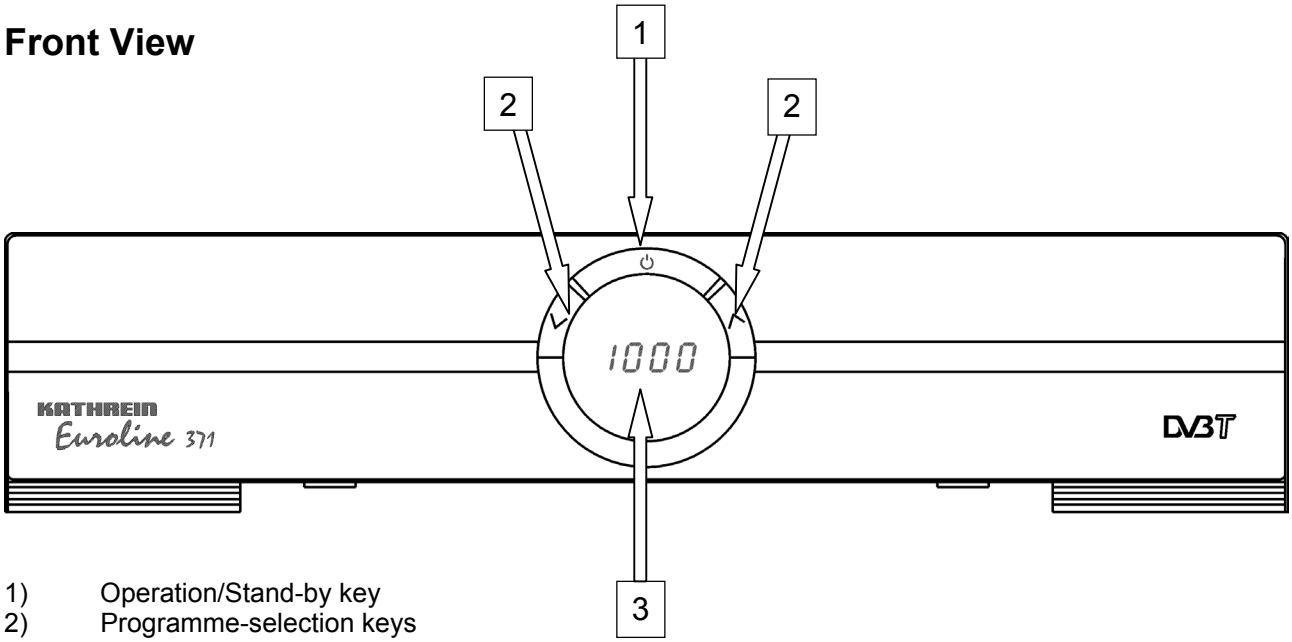
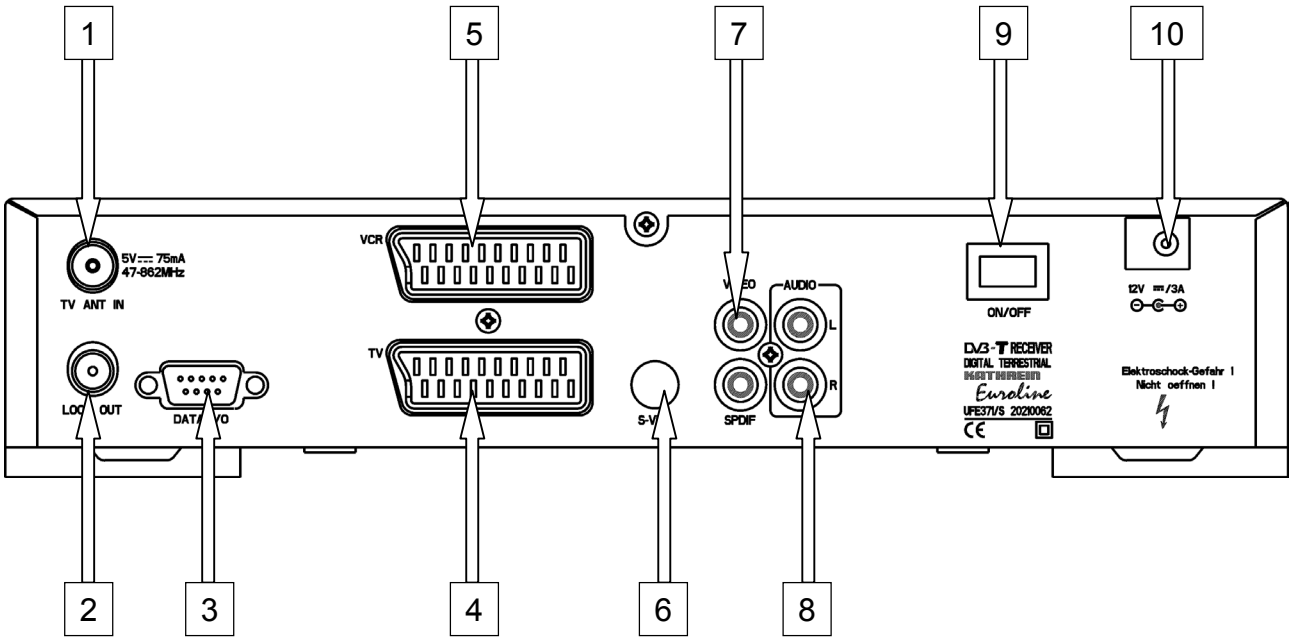
Views and Connections

Front View



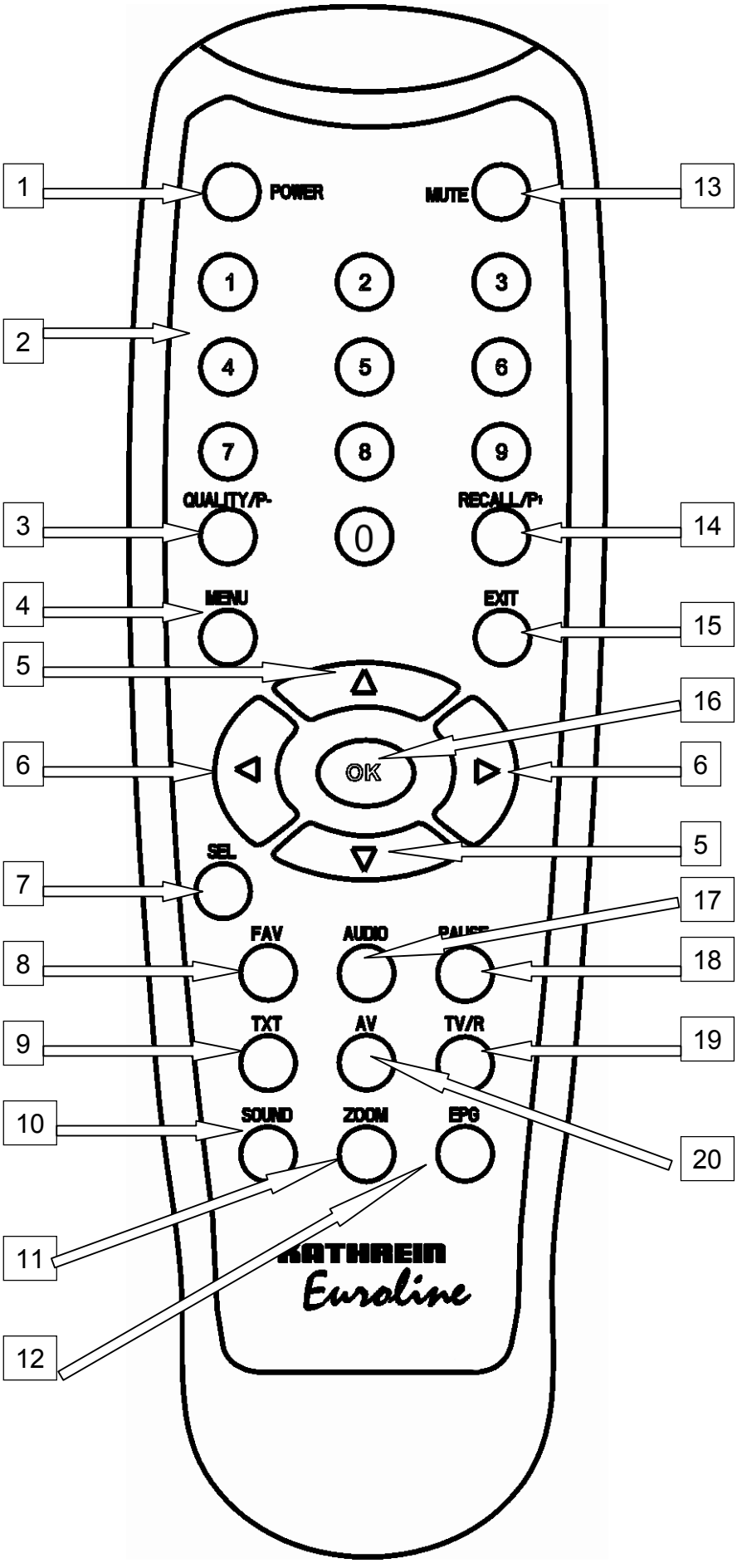
1) Operation/Stand-by key
2) Programme-selection keys
3) Programme display

Rear View



1) TV antenna input socket
2) TV antenna input (looped-through signal)
3) RS 232 data interface for serial data transmission during maintenance service (only with null modem)
4) SCART connection for TV set
5) SCART connection for video recorder
6) S-VHS output
7) Video output cinch socket
8) Audio output cinch sockets for stereo equipment (left and right)
9) Mains switch (On/Off)
10) DC input

Remote Control



Remote Control

Functions of the Remote Control

1) **POWER:**
   switching on and stand-by mode
2) **Numeric keypad (0-9):**
   For entering programme numbers or menu parameters
3) **QUALITY/P-:**
   Displays the DVB-T signal level of the current programme. Also used for the antenna alignment and for paging (-) in lists
4) **MENU:**
   Call-up of the main menu
5) **Up/Down:**
   For changing channels and/or navigating through menus
6) **Left/Right:**
   Volume control and/or navigating through menus
7) **SEL:**
   Not used
8) **FAV:**
   Displays favourite programmes list (press this key repeatedly to display the different lists)
9) **TXT**
   Displays detailed information on the current programme (this information can also be called up with the EPG menu).
10) **SOUND:**
    Sound selection between left/right/stereo and the blue function key in the menus
11) **ZOOM:**
    Reduces the picture format
12) **EPG:**
    Electronic Programme Guide and yellow function key in the menus. Press this key to call up the Electronic Programme Guide (if available)
13) **MUTE:**
    Turns off the sound
14) **RECALL/P+:**
    Calls up the programme last running, or the programme that has been selected in the list (+)
15) **EXIT:**
    Leave the menu, or change from a sub-menu to its respective main menu
16) **OK:**
    Press this key to display the programme list, or to confirm the options in the various menus
17) **AUDIO:**
    Select the language or the audio channel for multilingual programmes
18) **PAUSE:**
    Freeze image/statue
19) **TV/R:**
    Toggle between Radio and TV mode
20) **AV:**
    Switches the TV-SCART socket (Pin 8) between TV and AV reception

Using the Remote Control

You can use the **OK** key to confirm the individual settings in the menus or to call up sub-menus.
Change each setting line by line, and confirm the entry by pressing the **OK** key.
Press **EXIT** key to leave the menu, or change from a sub-menu to ist respective main menu.

Use the ▲ / ▼ keys to navigate through the menus. Use the ◀ / ▶ keys to enter the individual requirements. You can also enter the values in the appropriate fields using the numeric keypad.

The coloured keys are used for the functions within the various sub-menus. The functions of the respective menu are displayed on the screen.
A line in which the individual functions are explained appears in each menu.

Inserting Batteries in the Remote Control

Remove the cover on the rear of the remote control. Insert the two batteries supplied into the remote control, ensuring correct polarity which is shown on the base of the battery compartment.
Slide the cover back onto the housing until it locks in place.

Used batteries are special waste. Do not throw used batteries into your household waste; take them to a collection point for old batteries!

Electronic equipment is not household waste - in accordance with directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL dated 27th January 2003 on used electrical and electronic equipment, it must be disposed of properly.
At the end of its service life, take this unit for disposal at a designated public collection point.

Safety Notices

This page contains important instructions for putting the device into service and installing and connecting it.

Read these instructions with care before putting the device into service.

DANGER!

Power cable

Make sure you do not damage the power cable. Devices with damaged power cables must be disconnected (by pulling the plug) and repaired by a technician before being restored to service. Only use the supplied mains adapter (as intended)!

There is a danger of life-threatening electrical shocks!

Cleaning

Pull the power plug before cleaning the device. Use a dry cloth for cleaning and only clean the surface. Do not under any circumstances open the device.

There is a danger to life due to electrocution if components are touched within the device!

Playing children

Take care that children do not insert objects in the ventilation slits.

There is a danger of life-threatening electrical shocks!

WARNING!

Earth connection

The aerial system should be connected to earth or to the potential equalisation according to instructions. Observe EN 60728/11 and any national regulations in the process.

There is a danger due to overvoltage or lightning!

Mains voltage

Only operate the device with the specified mains voltage (on the back of the device or on the external mains adapter). The device may only be connected to the mains and switched on after establishing the connections to the aerial and the television set or to the cable network and the PC.

There is a danger of fire if the mains voltage is too high!

Repairs

Have your device repaired by qualified technicians only. No warranty claims will be accepted if the device is opened and an attempt is made to repair the device without any authorisation.
The electrical safety of the device can be put at risk by handling the device inappropriately.

The manufacturer assumes no liability for any accidents of the user while the device is open!

CAUTION!

Connections

Incorrect wiring of the connections can result in malfunctions or damage to the device!

Long periods of absence / Thunder storms

Always switch of the device at the mains switch in the event of long periods of absence or thunder storms. You can disconnect the device from the mains by pulling the power plug if your device does not happen to have a mains switch. This also applies to any other devices connected to the device. We also recommend disconnecting cable networks. Observe any timer programming procedures (receiver) and switch the device back on again in due time before recording begins.

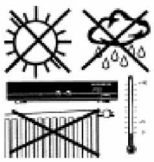
Place of installation

Every electronic device generates heat. The heat generated by the device is within an acceptable range however. Sensitive furniture surfaces and veneers may change their colour in the course of time due to the constant exposure to heat. In the same way, the feet of the device may cause treated furniture surfaces to change their colour. If necessary, place the device on an appropriate firm and flat base.

Ventilation

The heat generated in the device is discharged sufficiently. Nevertheless do not install the device in a cupboard or on a shelf with insufficient ventilation. Never cover the ventilation slits of the device!

Do not put any objects on the device and keep a clearance of at least 10 cm above the device so that the generated heat can be discharged without any difficulty.

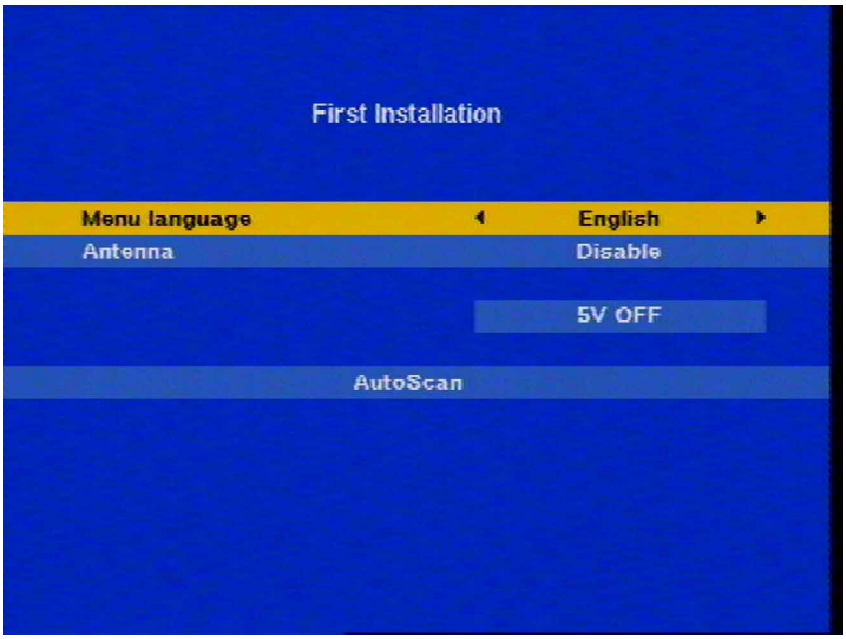


Humidity, insulation, heat

Protect the device against humidity and dripping and splashing water. Do not place the device near the heating, expose it to the sun or operate it in damp rooms.

First Installation

When you have connected your receiver properly, switch it on using the power switch on the rear of the unit. You will see the following:



Now select the language in which you would like to see the menu by using the ◂ / ▸ keys.
If you use a DVB-T indoor antenna (e.g. the Kathrein BZD 30), the antenna must receive a supply voltage of 5V (unless the antenna has its own power supply). The standard setting is 5V OFF (inactive); you can use the ◂ / ▸ keys to switch the power supply on, 5V ON (active).

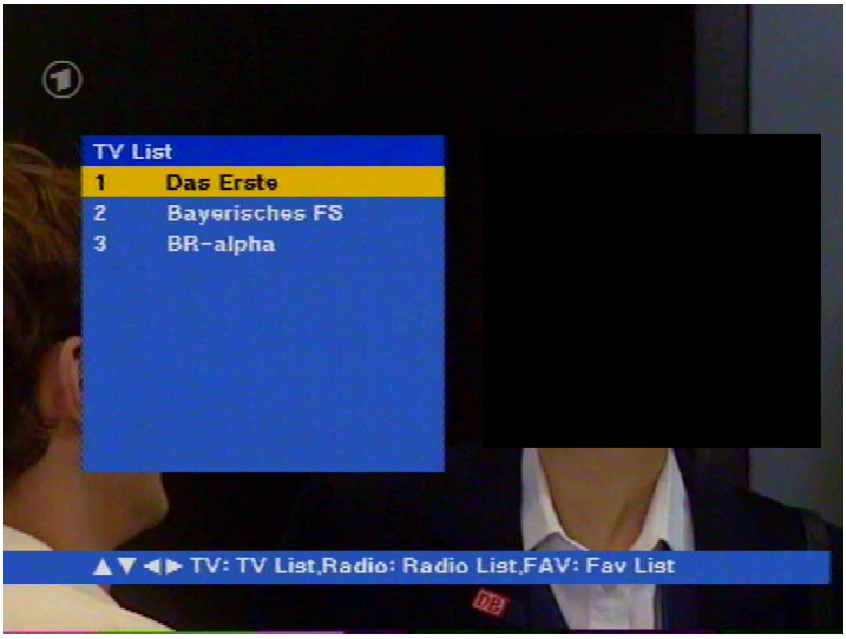
Confirm your entry with the OK key. The receiver now skips automatically to the “Programme search“ menu, and starts the automatic programme search of the entire frequency range.

The programmes/channels which the receiver has found are stored in the pre-set programme list. You can use the ▲ / ▼ keys to change between the channels as usual.

Programme Selection (TV and Radio)

The receiver is preassigned for the most common programmes. Your terrestrial antenna must accurately aligned to achieve proper reception.

Press the **OK** key to call up the list of existing programmes.



Select the programme using the ▲/▼ keys, and press the **OK** key.

Note:

*You may also call up the programme list by pressing the **OK** key straight away.*

To select, enter the programme number using the numeric keypad on the remote control.

Press the **TV/R** key to switch from the TV list to the radio list, and press **FAV** key to call up the favourite programme list (4 lists).

You can skip from page to page of these lists using the **Quality/P-**, **Recall/P+** or ◀ / ▶ keys. When you press the **EXIT** key, the list is will disappear from the display.

Programme Information

When you change to another channel, the following information is displayed at the bottom of the screen:

- The type of programme: TV or Radio (indicated by an icon)
- The name of the programme
- EPG (Electronic Programme Guide) reception, indicated by the letter ”E”
- Videotext reception, indicated by the letter “T”
- The time

Videotext

If a videotext signal is available, the receiver will transmit it permanently to the TV set.

You can call up and operate videotext as usual with the remote control of your TV set.

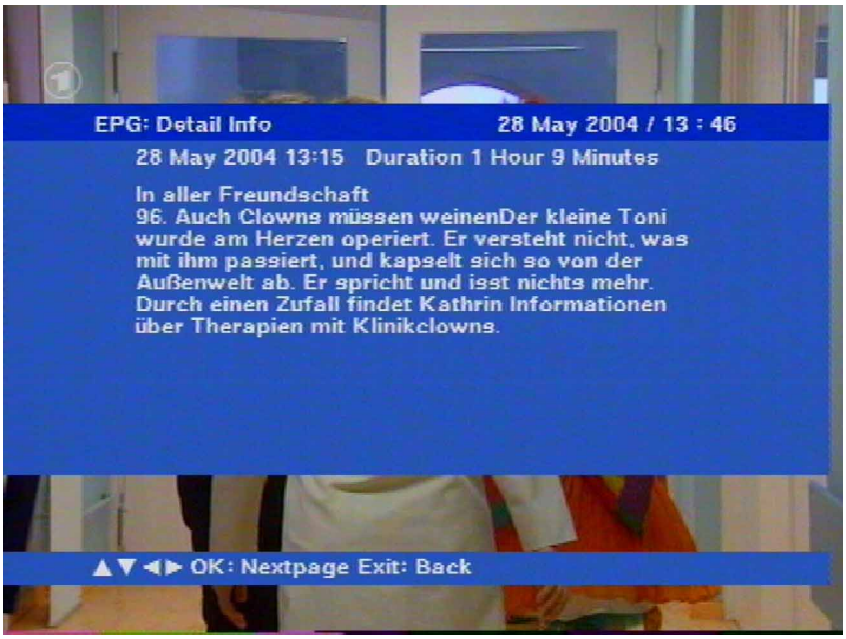
Electronic Programme Guide (EPG)

The **EPG** (Electronic Programme Guide) key can be used to call up the programme information, if broadcast by the programme provider.

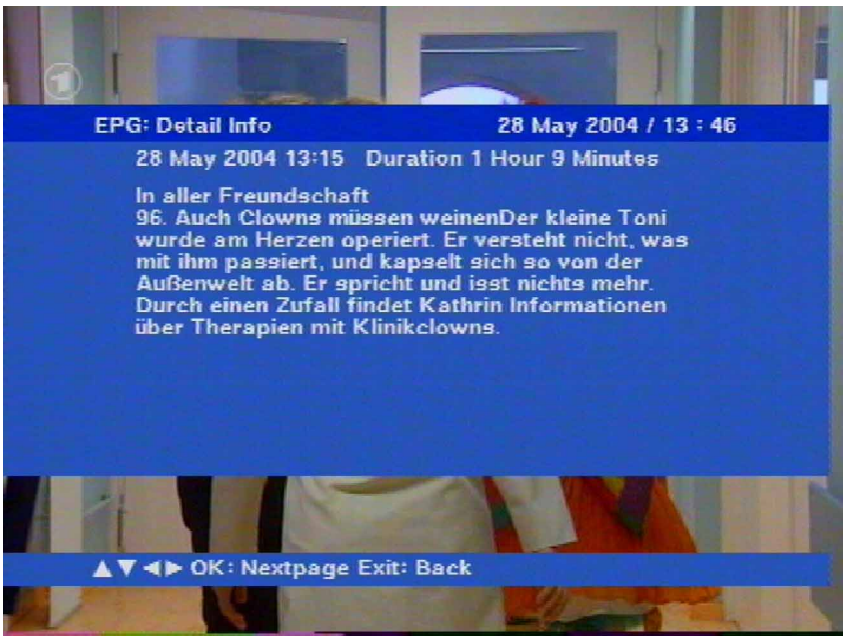
You can switch to the desired programme by pressing either ▲ or ▼.

For automatical programming, press the **blue** key. The timer will then be set automatically

To have the details displayed (extended mode), press the **red** key. The following on-screen display (OSD) appears:


EPG: Detail Info
28 May 2004 / 13 : 46
28 May 2004 13:15 Duration 1 Hour 9 Minutes
In aller Freundschaft
96. Auch Clowns müssen weinenDer kleine Toni wurde am Herzen operiert. Er versteht nicht, was mit ihm passiert, und kapselt sich so von der Außenwelt ab. Er spricht und isst nichts mehr. Durch einen Zufall findet Kathrin Informationen über Therapien mit Klinikclowns.
OK: Nextpage Exit: Back

You can also obtain detailed information directly from the current programme, using the **red** key. You will then see a display of the desired data about the current TV programme without having to switch to EPG mode first (see illustration).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▲▼◀▶ OK: Nextpage Exit: Back

To switch to the next or previous day, press the **Recall/P+** or **Quality/P-** key, respectively.

Note:

To load the programme information, you must leave the desired programme switched on for a few moments.
When you press the **Red** key while a programme is running, you enter “Extended Mode”. Here, you will see a display of detailed information on the current programme. The current programme remains in the background.

Audio

With the **Audio** key, you can display the sound (TV or Radio) that is being broadcast over the reception channel.
Select the sound, and store it with the **OK** key. If the transmitter is not sending language information, the receiver displays «Unknown». To switch between left/right/stereo, use the **SOUND** key.

Pause and Zoom

You can use these keys to make the picture smaller, or to switch to freeze image.

The Quality Key (Auxiliary function for antenna adjustment)

In addition to the display showing strength and quality of reception, the receiver has also an auxiliary function with an acoustic signal for the antenna alignment.
To use this function, change to the desired programme, and press the **Quality** key.
As soon as the quality display is activated, the receiver transmits an acoustic signal, the frequency and action replay is the same as of the received-signal.

Calling up the Main Menu (MENU key)

Press the **MENU** key to call up the main menu, select the desired sub-menu, and press the **OK** key.

There are five sub-menus available, which are explained below:

1) **Timer**
   Menu for setting time-delayed recording or automatic stop

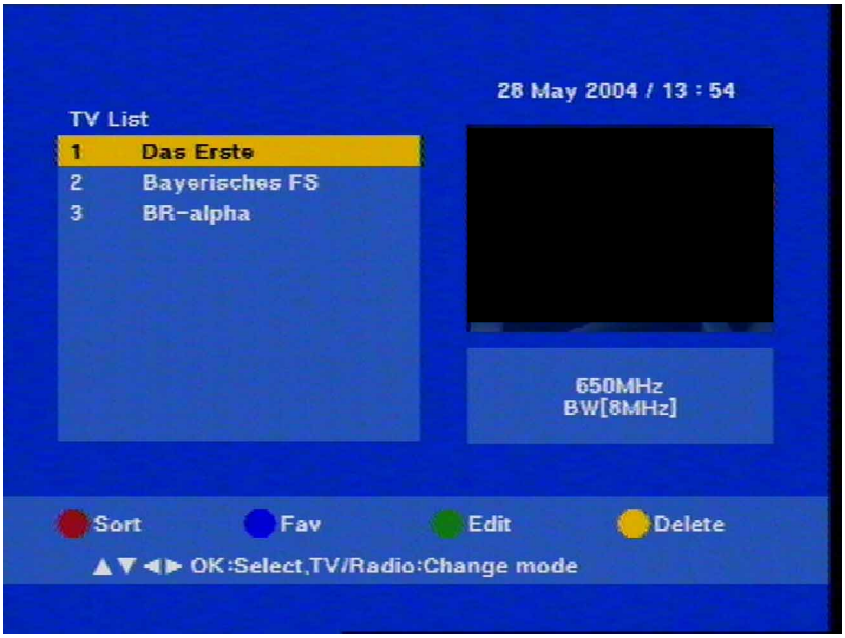
2) **Edit Channel List**
   Allows the organisation, storing and the sorting, and allocation to the channel list

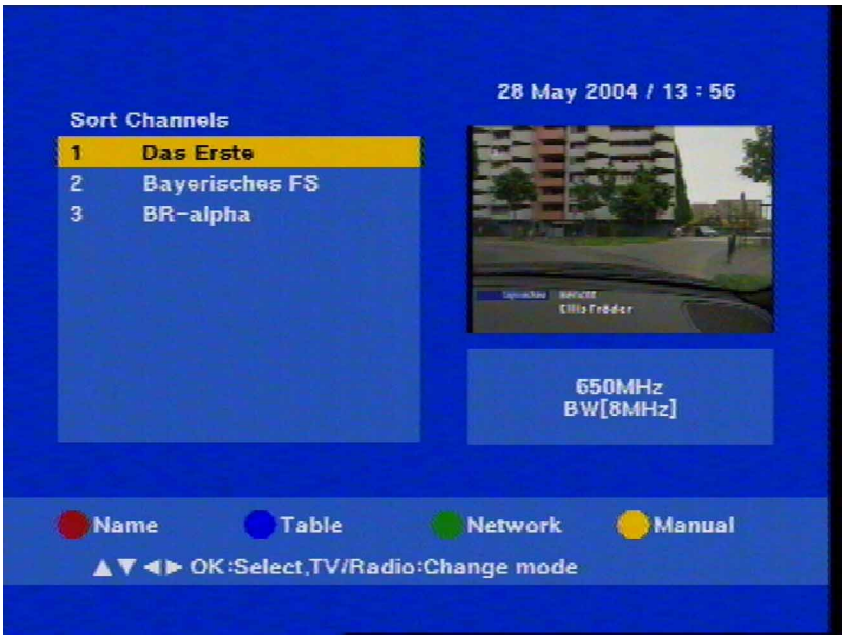
3) **Edit Favourite List**
   Allows the organisation, storing and the sorting, and allocation to the favourite programme list

4) **Installation**
   Menus for setting up the antenna, the channels, the system menu and the parental lock

5) **Game**
   Two games available

Organising Programmes and Favourites





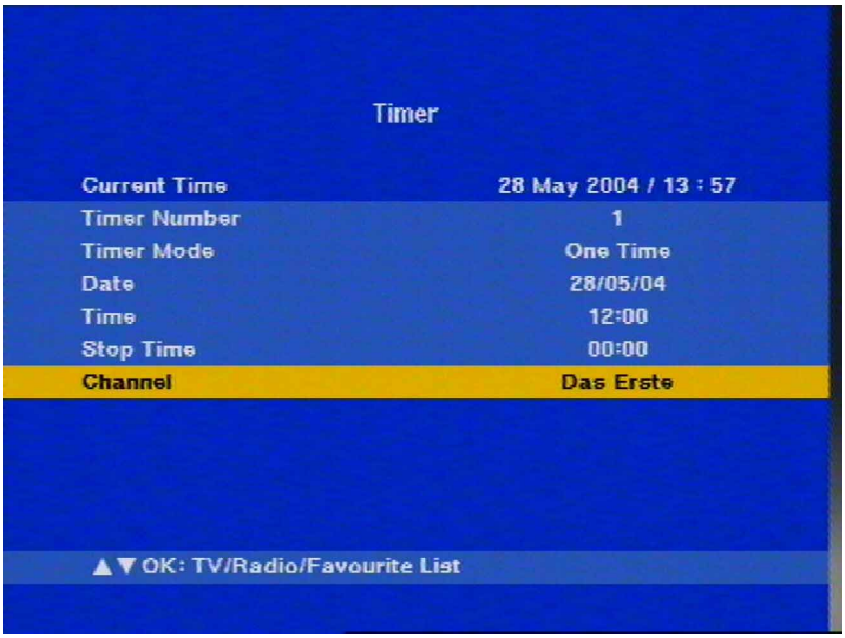
Sorting:
Press the **red** key to call up the sort functions. When you exit the menu, the receiver prompts you for password confirmation.

Attention!

When sorting has been confirmed, access to the previous lists is no longer possible.

Favourites:
Press the **blue** key in the “Programme Organisation” menu, and then allocate the programmes to the appropriate Favourite lists, using the coloured keys.
Other List:
Change the Favourite list in the “Favourite Lists“ menu:
Process (**green** key): Store (access is password protected), Skip (remove a programme from the main list).
Delete (**yellow** key): Delete a programme

Setting the Timer (Automatic Programming)



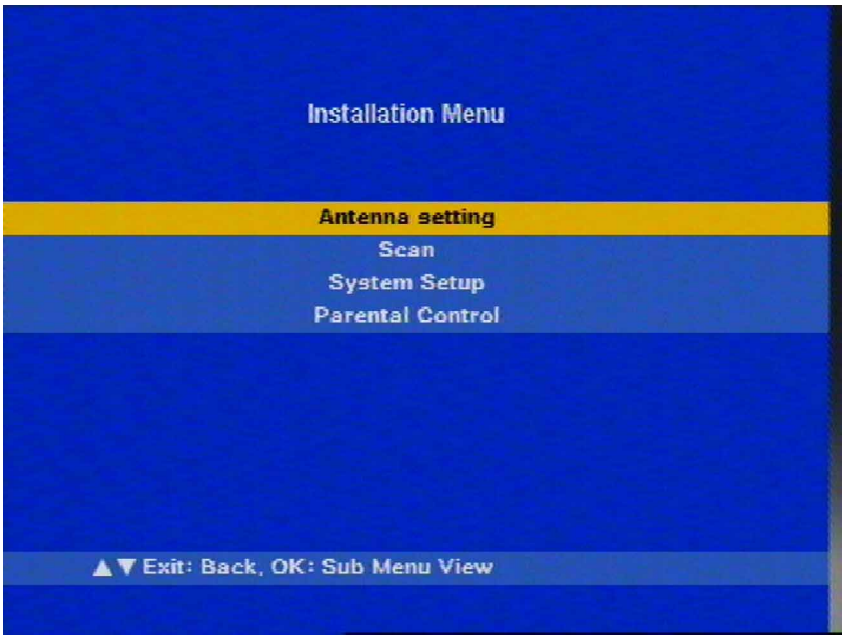
Note:

The timer can also be programmed with the Electronic Programme Guide (EPG). See Page 14.

The clock must be set correctly in order that the timer is ready for operation (see Installation Menu).
Programme the Timer Number (1 to 8), activate the timer to release the settings, and then select status, start time and end time, and the number of the desired programme.

To select the programme, press the **OK** key in the “Channel” field. The programme list is displayed, and you can now select the desired programme with the ▲/▼ keys. Confirm the selection with the **OK** key to take it over in the timer.

Installation Menu



Adjusting the receiver to your receiving installation:

1) **Antenna alignment**
   Select 5 V power supply (On/Off) for the antenna

2) **Scan**
   Auto Scan (overall search), Net Scan (network search), TP Scan (specific channels) and PID Scan (search for one specific programme, using the PID).

4) **System setup**
   Adjustment to your TV set and other individual settings, or reset to factory setting: You can restore the factory setting your receiver was delivered with (factory reset).

Attention!

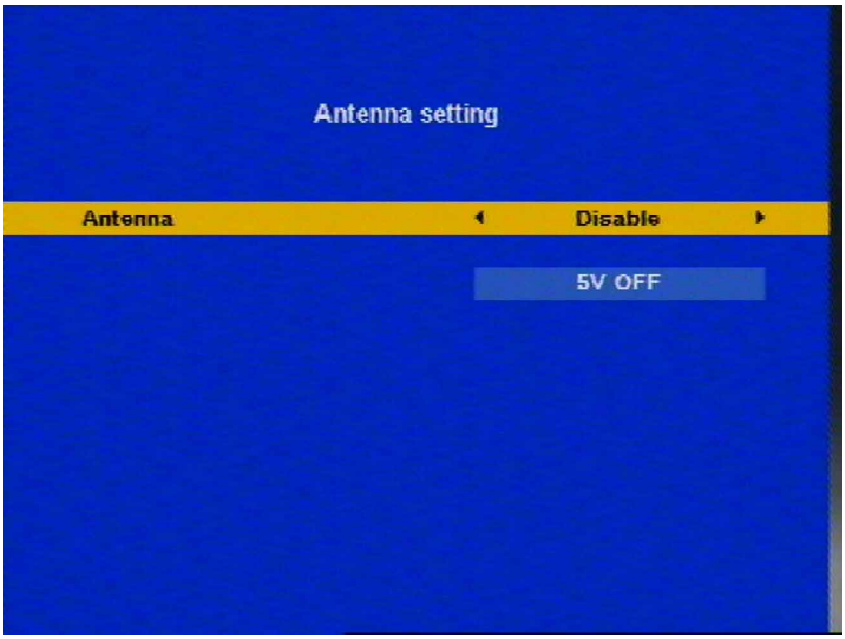
In this case, all the changes you may have made to the programming of the receivers will be deleted.

6) **Parental lock**
   Locking access to the menu and changing the password

Note:

The receiver is preassigned and delivered with the installation menu protected by the password “0000”.

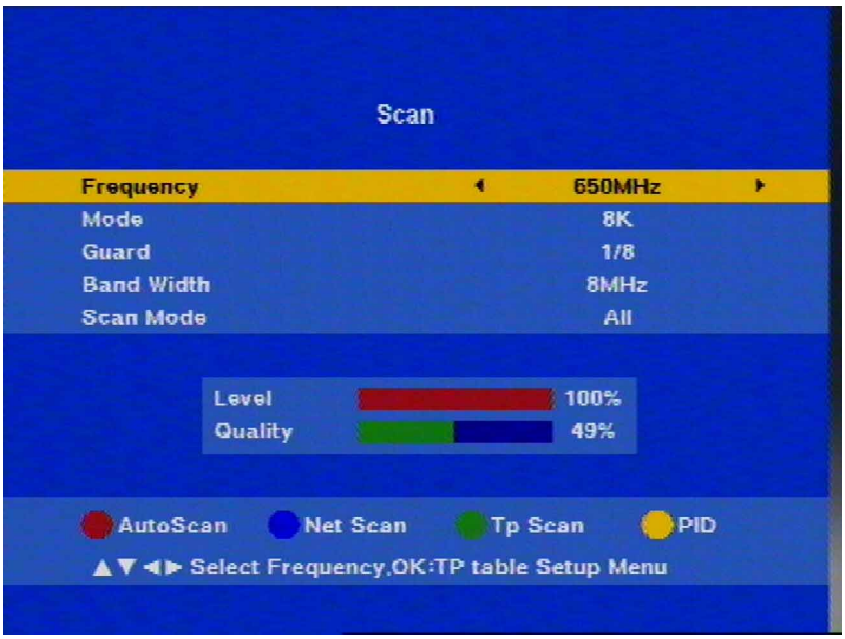
Antenna Type



Note:

Should you use a DVB-T indoor antenna (e.g. Kathrein BZD 30, visible in the background), it must receive a power supply of 5 V. If the antenna has its own power supply, the default setting of 5 V AUS (inactive) must be retained.

Setting Up a Channel



Although the receiver is preassigned, it may be necessary to update the programme list.

Installation Menu

In this menu, you can carry out the programme search.

1) **AutoScan**

   All channels in the range of 177 MHz to 858 MHz are searched for programmes.

2) **Net Scan**

   The entire network is searched for network information. (Results only if this information is transmitted with the programmes).

3) **TP Scan**

   Search for individual channels.

4) **PID**

   Enter audio and video PID for a detailed search for individual programmes.

5) **Scan Mode**

   Selection of: All or FTA (free-to-air programmes only) – when you run a programme search for all programmes, all programmes are stored, including the encoded transmitters; otherwise, only the free programmes are stored.

Programme Scan:

Note: *In addition to the indicator of reception intensity and reception quality, the receiver has an assist function with a acoustic signal for adjusting the antenna, you can activate in this menu by pressing the* ***Mute*** *key.*

With the **red** key you can start the programme search for the entire frequency range. The receiver prompts you to confirm that you wish to delete the existent programmes. If you confirm with «JA», all the allocated programmes are deleted and the new programming entered in the main list (in order of the factory-set pre-programming at the factory).
If you select «EXIT», the programme search will not be started.

Note: ***Should you be in the catchement area of two DVB-T networks, it may happen that you find some channels twice in your programme list after you run the "AutoScan". You can leave them as they are, or you can decide in favour of the programme which provides the better image (reception), and delete the other one.***

Start the scan by pressing the **green** key for a specific channel. The programmes that are found will be added on the end of the programme list.

PID (Programme Identification) input:
Press the **yellow** key, enter the video PID and the audio PID, and press the **yellow** key again. The programme, identified with «TV CH», will be placed at the end of the main list.

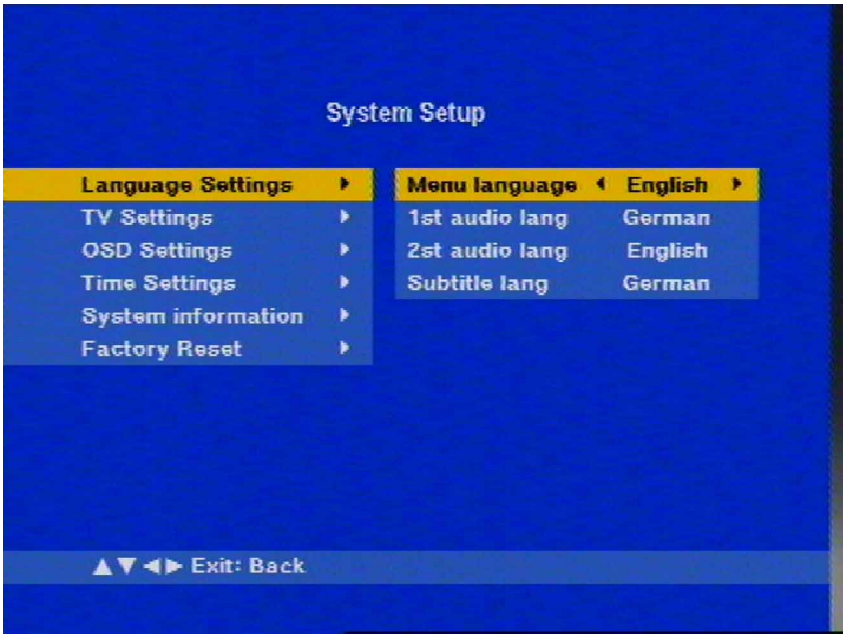
Installation Menu

System Configuration

This menu allows the adaptation of your receiver to your audio-visual surroundings, or the reset to the factory settings:

Setting Languages

Access to language selection. The following menu languages are available: German, Spanish, Italian, Czech and English. The preferred languages for audio and sub-titles are also selected here. The selections are made by pressing the ▲/▼ and ◀/▶ keys. Confirm your settings with the **OK** key.

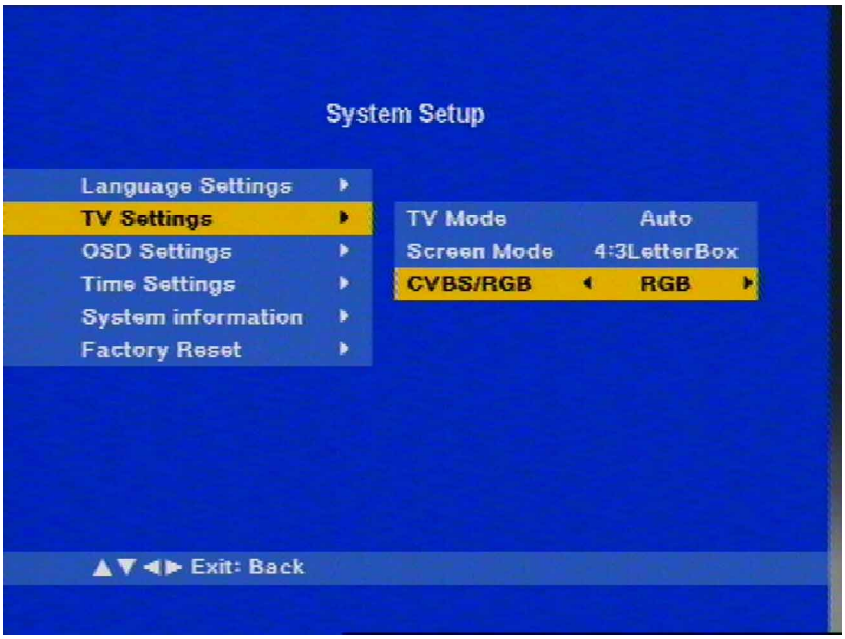


Installation Menu

Setting TV

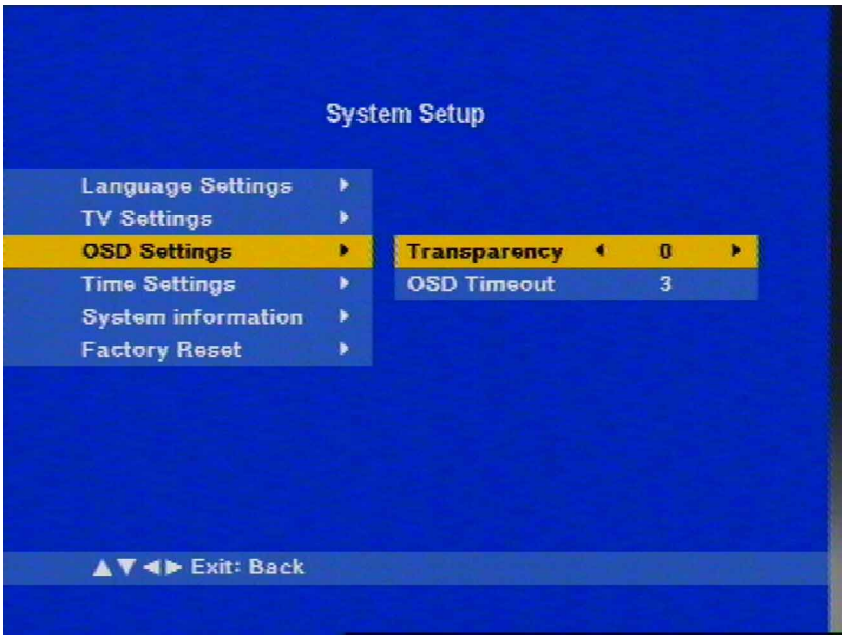
Selection of video output standard (PAL, NTSC, SECAM, AUTO), screen format type (4/3 or 16/9) and the output signal which can be obtained at the TV output:
CVBS: composite colour video signal
RGB: separate signals for red/green/blue

Note: *The selection of the screen format type (4/3 or 16/9) always depends on your TV set, not on the programme you selected!*



Setting OSD

Select the various colours and display parameters with the ◂ / ▸ keys.



Clock Parameters

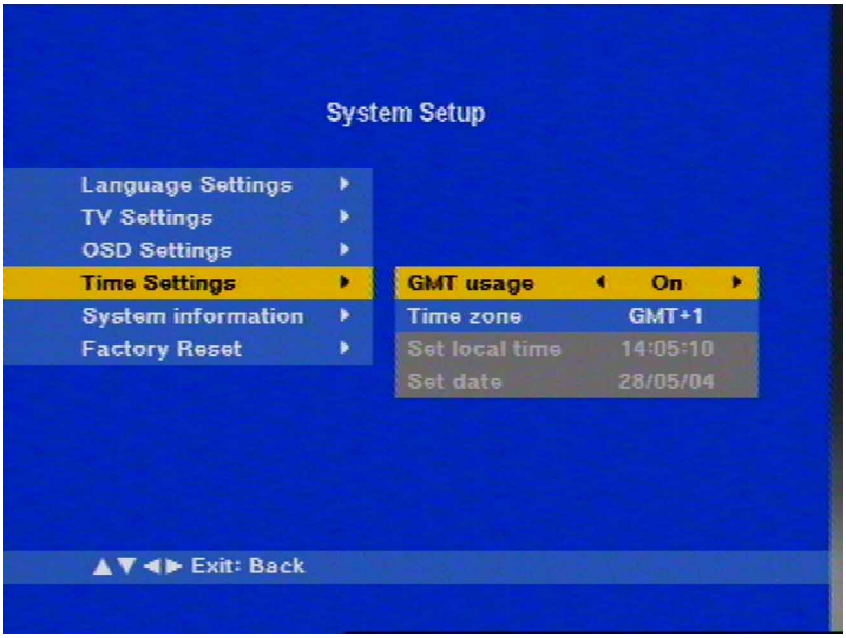
Date and time must be programmed in order that the receiver indicates the correct information messages when you use the timers, and in the information messages mode (and on the front in stand-by mode).

The internal clock can be set as follows:

a) The transmitted time of day can be used (default setting). In this case, the difference between GMT and local time must be allowed for (in Germany, + 2 hrs. In summer, + 1 hr. in winter).
b) If you select «AUS» (off) in the first field, you must enter the time and date manually, with the numeric keypad.

Note:

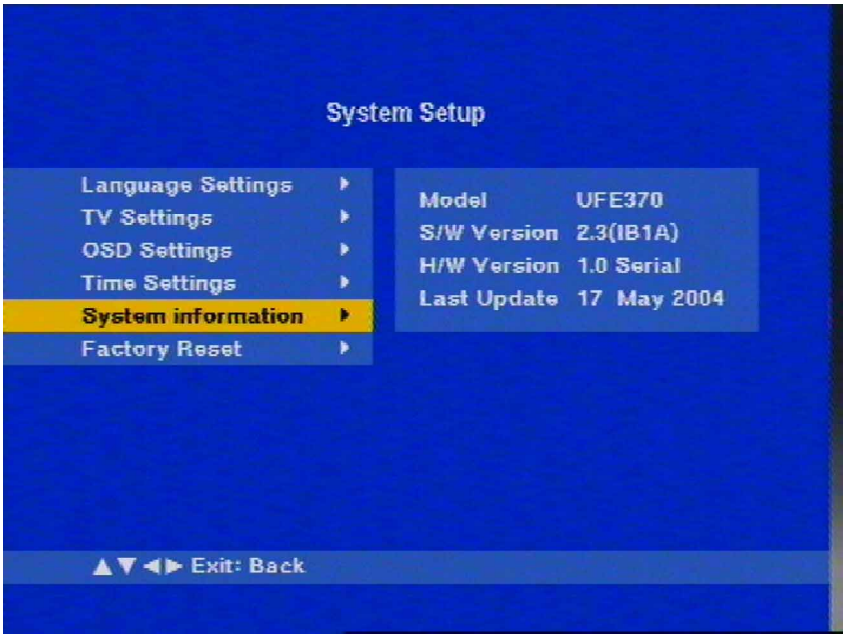
Some programmes may not transmit correct UTC. In this case, the receiver displays the wrong time of day. To display the time of day you had before, switch to another European programme, and wait a few minutes until the receiver shows the correct time again.



Installation Menu

System Information

Display of the hardware and software versions of the receiver.

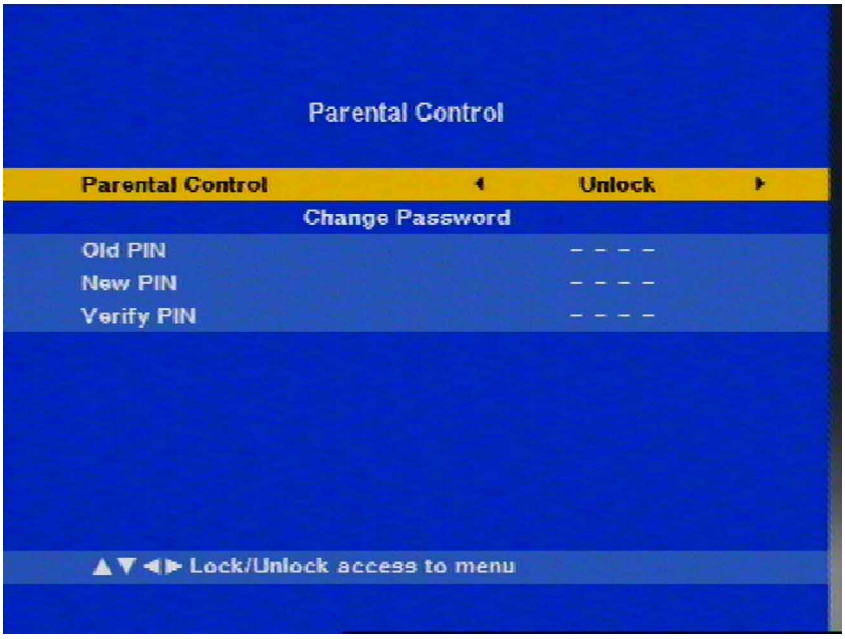


Factory Settings

This menu is protected with the password “0000”. If you have changed the programming of the receiver and want to return it to the condition in which it was delivered, select this item. Press the **OK** key and enter the password. After about a minute, the memory will have been updated; then switch the receiver off and on again. The same image as in the initial installation appears.

Attention: *The receiver will be factory-reset; any changes that you may have made will be lost.*

Parental Lock



In this menu, you can lock all menus to prevent inadvertent wrong setting.

The receiver is delivered with the installation menu locked, but the other menus are not protected.
For child protection, it is necessary to lock all the menus.

Attention:

Keep *the password in mind in case you have changed it. Should you forget the password, an intervention carried out by the repair service will be needful. This intervention, however, will not be under guarantee.*

Software Update

Attention:

A PC and a null-modem cable are required for the update process!

If new software for your DVB-T receiver should become available, you can download it from the following homepage:

www.esc-kathrein.de/download/

There you will also find information and notes on the software update process via the RS 232 interface on the receiver. You can also order the required null-modem cable from the ESC company in Grassau at the following address:

ESC Elektronik Service
Chiemgau GmbH
Bahnhofstraße 108

83224 Grassau

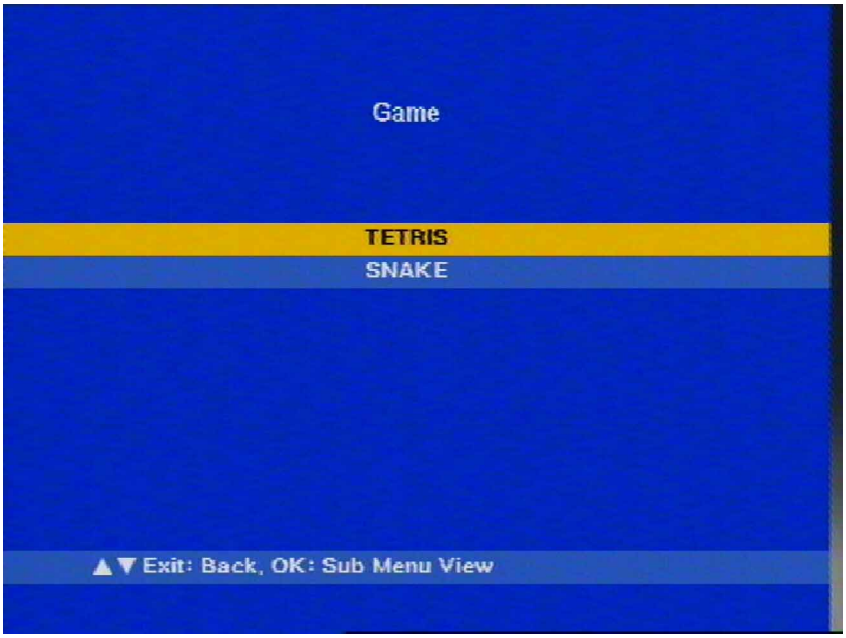
Tel.: (0 86 41) 95 45-0
Fax.: (0 86 41) 95 45 35 u. 95 45 36
E-mail: service@esc-kathrein.de
Internet: http://www.esc-kathrein.de

Note:

After successful software download of the software, you must carry out a works reset. Your old password is no longer valid after the software update. You must now enter the universal password (0786).
You will find instructions how to carry out the works reset on Page 25.

Games

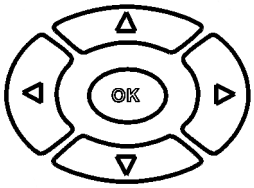
Use the ▲/▼ keys in the main menu to select “Games” and press then **OK**. The following is then displayed:



Choose one of the two games listed.

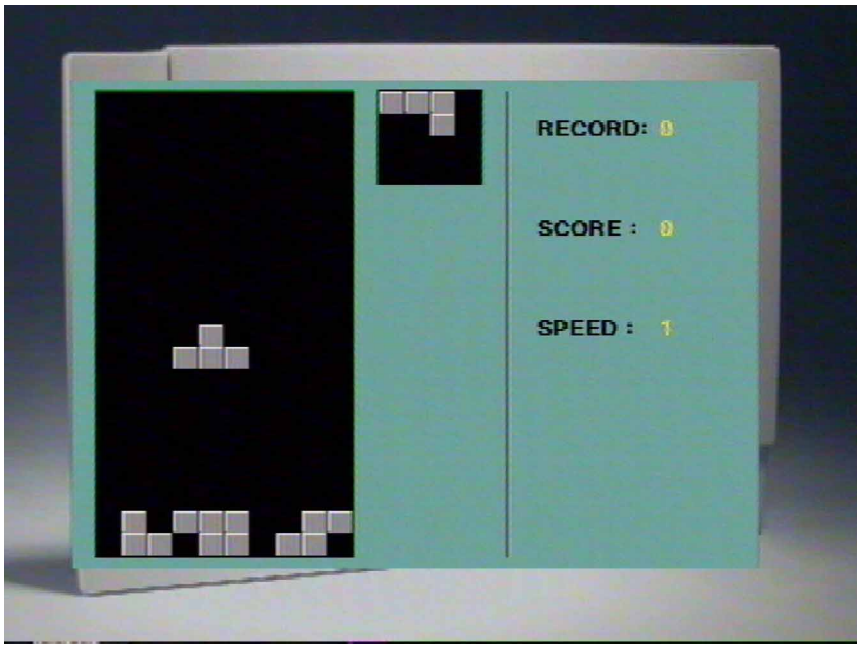
Note:

When you have selected a game, please follow the on-screen notes. All games are controlled with the keys shown below:

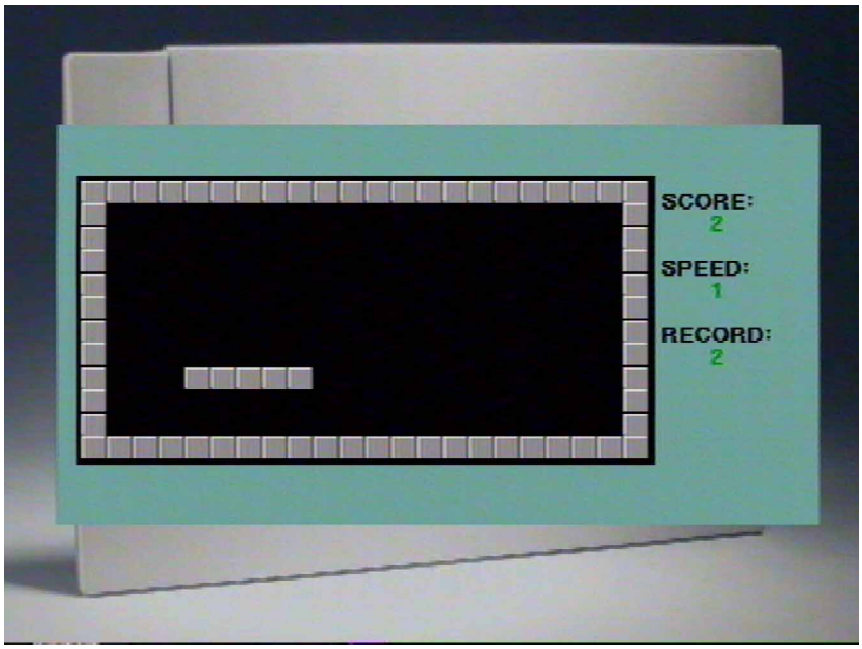


Games

Tetris



Snake



Functions and Technical Data

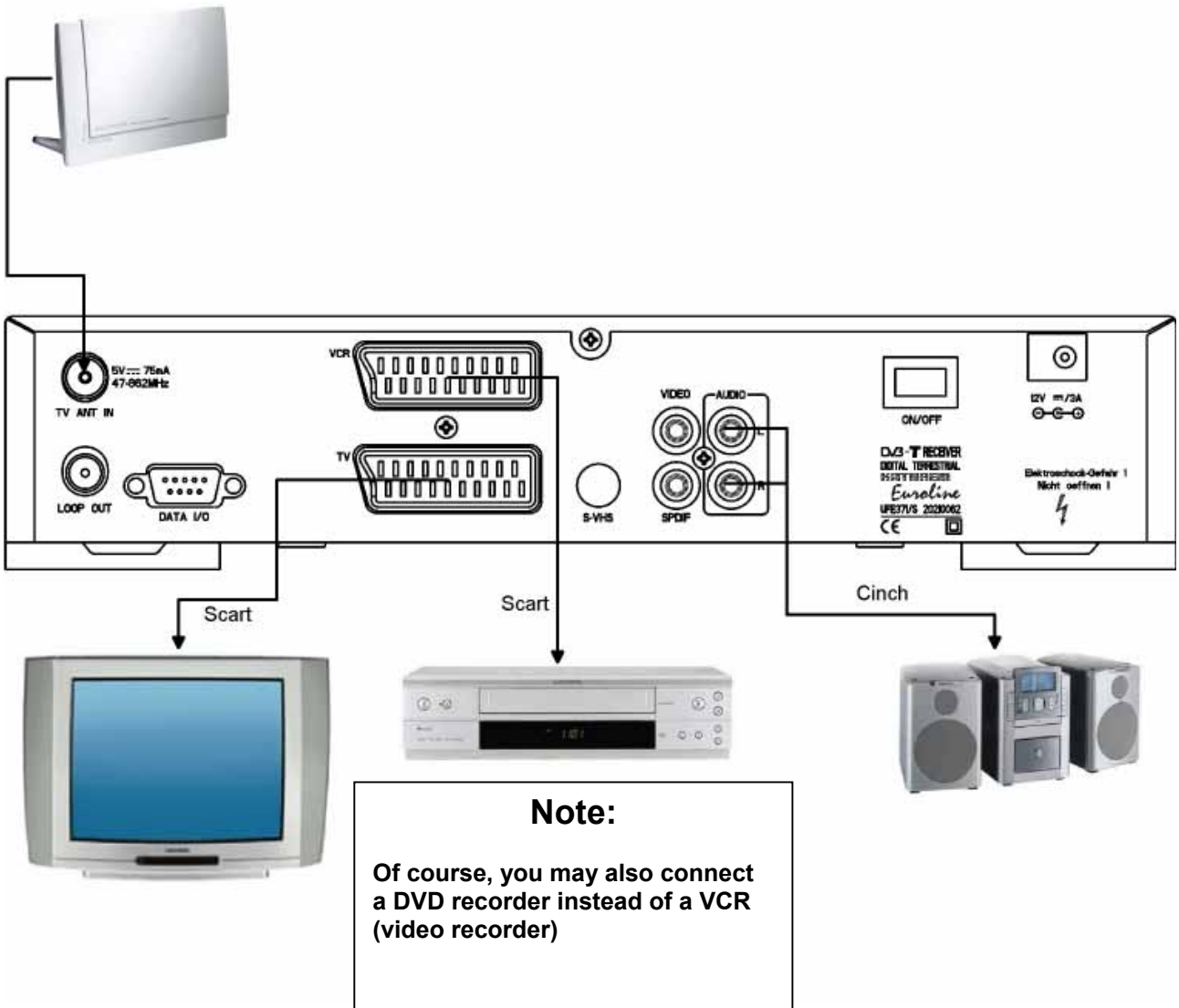
- Reception of free, digital terrestrial TV and radio programmes
- 1000 Programme memory positions
- Electronic Programme Guide (EPG), showing information on the current and the succeeding programmes of the next few days*)
- 8 Timers – programmable also via EPG
- Software update for operating software via RS 232 serial interface
- On Screen Display (OSD) in five languages (D, GB, I, ESP, CZ)
- Videotext conversion (display on TV set)
- Automatic 4:3 and 16:9 format recognition
- Manual entry of PID data
- Automatic date and time setting via DVB data stream
- Programme scan
- TV SCART socket with composite colour and RGB signals
- VCR SCART socket with composite colour signal
- Video/audio output via cinch sockets
- S-VHS output
- Digital audio output (SPDIF format)
- Radio key
- Antenna-level display (visual and acoustic)
- Volume control and mute function
- 4 digit LED display
- An active indoor antenna (e.g. Kathrein BZD 30) can be operated without a separate mains adapter
- IR remote control
- Power switch
- 230/12 V= power supply unit for stationary use (in scope of delivery)

*) display of information only if broadcast by the programme provider

Functions and Technical Data

Designation		**UFD 371/S**
Order Number		20210062
		CE
RF Characteristics		
Input frequency range	**MHz**	177.5-226.5 and 474-858
Channel bandwidth	MHz	7/8 switchable
Modulation type		COFDM 2k, 8k
Mapping		QPSK, 16-QAM, 64-QAM
Guard Interval		1/4, 1/8, 1/16, 1/32
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Input-level range/Impedance	dBµV/Ω	28-98/75
FM threshold	dB	Typically 3.6
TV System - Video		
Modulation, FEC, Demultiplexer		DVB-T-Standard EN 300 744
Video resolution		CCIR 601 (720 x 576 lines)
Video decoding		MPEG 2 compatible, ISO/IEC 13818-2 (Main@Layer)
Input data rate	Msymbols per s	5-31
Video bit rate	Mbits per s	1-15
Frequency range	MHz	0.02–5
Output voltage/Impedance	V/Ω	1/75
S/N	dB	≥ 53 typically
TV System - Audio		
Audio decoding		MPEG 1 and MPEG 2 compatible, ISO/IEC 13818-3 (Layers 1 and 2)
Sampling rate	kHz	32/44,1/48
Frequency range	kHz	0.04–20
Output voltage/Impedance (at 10 kΩ)	mV/Ω	770/75
S/N	dB	≥ 65
Processor		
Memory		
- Flash	MB	1
- SDRAM	MB	8
Processor clock-pulse rate	MHz	81
Power Supply		
Mains voltage (external mains adapter)	V/Hz	90-240/50-60/12 V=
Direct current	V	12
Power consumption, Operation/Stand-by	W	< 26/10
DC supply	V/mA	5/75 (via antenna input)
Connections		
HF Input/Output		IEC socket/pin
TV/VCR connection		2 SCART sockets, 21-pin
Video/Audio output		3 cinch sockets
Digital audio output		Cinch socket
S-VHS output		Hosiden socket
Data interface		RS 232 Sub-D, 9-pin
Miscellaneous		
Ambient temperature limit	°C	+5 to +40
Dimensions (W x H x D)	mm	298 x 65 x 223
Weight	kg	1.5

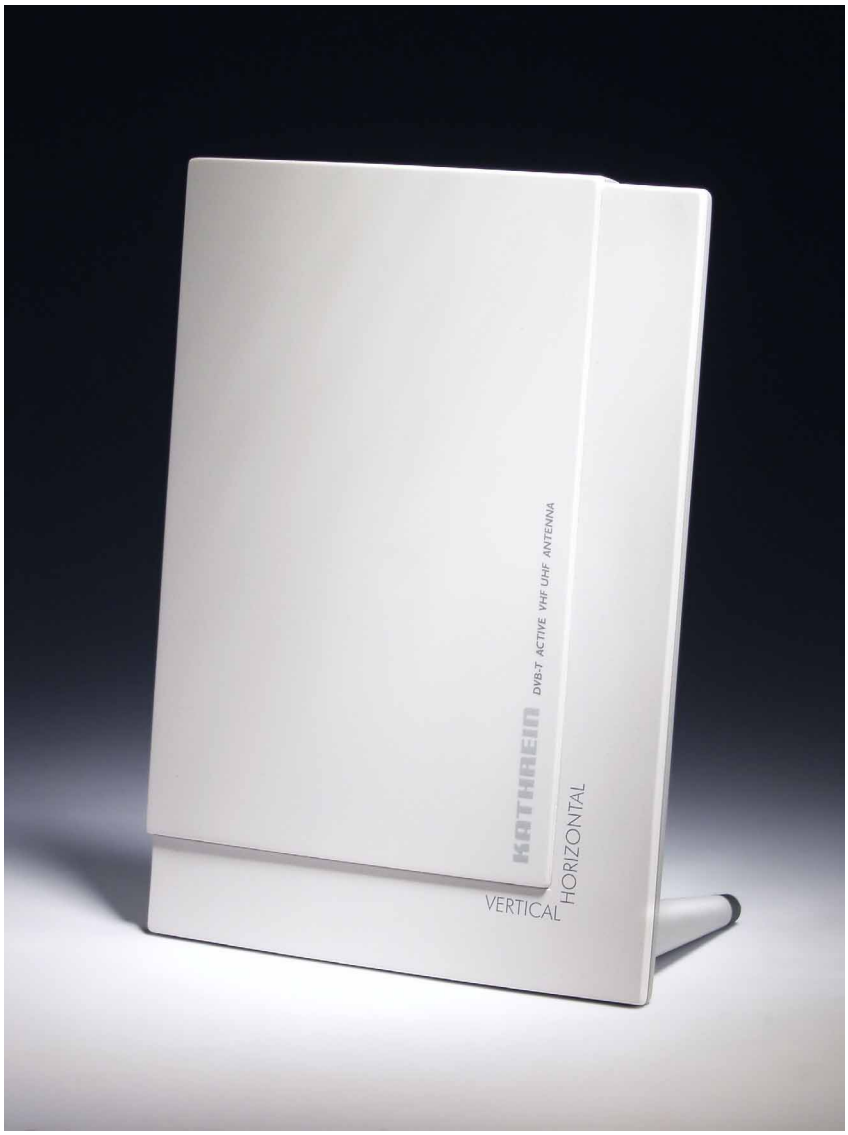
Connection Scheme



Note:

Of course, you may also connect a DVD recorder instead of a VCR (video recorder)

DVB-T-Indoor-Antenne BZD 30



The reception range of the antenna is 174-230 MHz in the VHF waveband, and 470-862 MHz in the UHF waveband. The BZD 30 has almost omnidirectional characteristics, so exact orientation is not necessary.

Depending on how it is installed, both vertical and horizontal polarisation can be received. The remote feeding (5 V/30 mA) is provided by the connected DVB-T receiver via the antenna output, e.g. Kathrein UFD 570/S, KATHREIN-Euroline® UFE 370/S or 371/S. This antenna is further characterised by its extremely low noise factor, and it has a stop filter for GSM interference.

With its shapely style and small size (140 x 195 mm), this antenna takes up little space and suits any kind of furniture.

The accessories supplied include a foothold for simple placement, a wall bracket with mounting material, and a 2 m connection cable.

Notice

Notice

936.2637/A/0705/ZWT - Technical alterations reserved!

Internet: http://www.kathrein.de

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